

ABSTRACT OF THE DISCLOSURE

A surface acoustic wave gas sensor for detecting predetermined substances includes a piezoelectric substrate, an input transducer and an output transducer which is formed on the piezoelectric substrate, and a sensitive film which is formed between the input transducer and the output transducer and detects at least one of acetone, benzene, dichloroethane, ethanol, and toluene. The sensitive film includes mercaptoundecanoic acid and CMP composed of cellulose nitrate, dibutyl phthalate, compound of benzene and ethanol, ethyl acetate. The surface acoustic wave gas sensor can quickly detect even small amounts of these substances.